



S1 Fig. EMSA demonstrating the specific interaction of GlnR (A) and PmrA (B) to the GlnR box in *p_{glnR}*, *p_{glnQ}*, and *p_{gdhA}*. All reactions were performed with 0.025 pmole of biotin-labeled probes. The reaction mixture was separated on a 6% polyacrylamide gel. Lane 1, reactions containing the wild-type probe only. Lanes 2 to 5, reactions containing the wild-type

probe and 16 nM to 128 nM of MBP-GlnR (A) and MBP-PmrA (B) in twofold increments, respectively. Lane 6, reactions containing the mutated probe only. Lanes 7 to 10, reactions containing the mutated probe and 16 nM to 128 nM of MBP-GlnR (A) and MBP-PmrA (B) in twofold increments, respectively. (C) Sequences of the wild-type GlnR box and the mutated box in *p_{glnR}*, *p_{glnQ}*, and *p_{gdhA}* are shown. The mutated bases are in lowercase letters.